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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,327	07/07/2006	Akira Ishikawa	0425-1246PUS1	6650
2292	7590	11/29/2007		
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER NGUYEN, KHANH TUAN	
			ART UNIT 1796	PAPER NUMBER
			NOTIFICATION DATE 11/29/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

**Office Action Summary**

Application No.

10/567,327

Applicant(s)

ISHIKAWA ET AL.

Examiner

Khanh T. Nguyen

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on RCE, filed on 10/12/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-5,7 and 10-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,10-16 and 18-26 is/are rejected.
- 7) ☒ Claim(s) 7 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/24/2007 has been entered.

2. The amendment filed on 10/12/2007 is entered and acknowledged by the Examiner. Claims 1, 3-5, 7, 10 and newly added claims 11-26 are currently pending in the instant application. Claims 2, 6, and 8-9 have been canceled.

### ***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-5, 11-16, 18, and 19 are rejected under 35 U.S.C. 103(a) as obvious over Shuichi et al (JP Pub. 2000/110077 hereinafter, "Shuichi") in view of Hiroshi et al. (JP Pub. 2000/110068 hereinafter, "Hiroshi").

With respect to claims 1, 3-4, 11-16, and 19, Shuichi discloses the liquid finishing compound for treating textile garments (clothing) such as shirts, trousers and blouses [0001]. The liquid finishing composition comprises of (A) amino-modified silicone [0005], (B) a tertiary amine, salt thereof, quaternary compound [0017], (C) a nonionic surfactant with 15-150 moles of alkylene oxide to a straight chain or the carbon number 8-22 of the branching [0020], (D) polyhydric alcohol [0021] and (E) alkanolamine [0022]. Shuichi also discloses the weight percent of components A, B, C, D, and E in table 6 [0038]. Shuichi further discloses additional additive such as cellulose (polymer compound) may be added to the said composition [0023]. Shuichi components are compared with the instant claimed component in the following table:

Shuichi Component(s)	Instant Claimed Component(s)
(C)	(a) Nonionic Surfactant
(A)	(b) Amino-modified Silicone Compound
(B)	(c) Tertiary Amine
(D) Polyhydric alcohol	
(E) Alkanolamine	
Additive: Cellulose	(d) polymer

The mass ratio of nonionic surfactant to amino-modified silicone, nonionic surfactant to tertiary amine, and  $[(\text{nonionic surfactant} + \text{amino-modified silicone})/(\text{tertiary amine} + \text{polymer compound})]$  may be calculated. It is within the expected skills of one having ordinary skill in the art to arrive at the optimum proportions of ingredients. See *In re Reese*, 129 USPQ 402 (CCPA 1961).

However, Shuichi does not explicitly disclose the properties of (C) nonionic surfactant having an HLB of 16 or more and a melting point of 30 to 80°C. Shuichi does not explicitly disclose the (C) nonionic surfactant presence in the composition from 1-60% mass.

In the same field of endeavor, Hiroshi discloses a nonionic surfactant (component B) having alkylene oxide of carbon number 2-3 to higher alcohol, higher fatty acid, or amine of carbon numbers 8-18 with the formula  $R_1-O-(CH_2CH_2O)_n-H$  wherein  $R_1$  carbon numbers 8-18 is preferred, the alkyl group or alkenyl radical of the

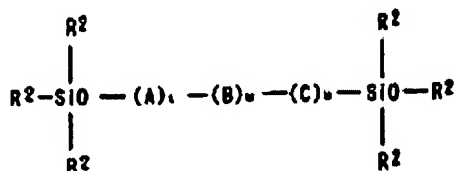
straight or branch chain, the number of ethylene oxide average addition (n) is 5 to 40 moles [0005]. Hiroshi also discloses said nonionic surfactant having HLB values of 8-16. The court has held that structurally similar compounds (i.e. nonionic surfactant or amino-modified silicone) are generally expected to have similar properties (i.e. melting point and kinematic viscosity). In re Gvurik, 596 F. 2d 1012, 201 USPQ 552. Hiroshi further discloses said nonionic surfactant may be present in a range from 0.005-10% weight [0010].

Therefore, one of ordinary skill in the art it would have had a reasonable expectation of success, because such a fiber treating composition containing nonionic surfactant with properties such as HLB of 16 and a melting point within the scope of the claim are expressly suggested by Shuichi in view of Hiroshi disclosure and therefore is an obvious composition.

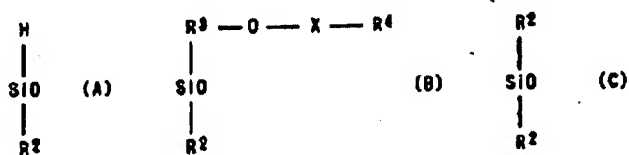
Regarding claim 5, Hiroshi further discloses a silicone compound having a polyoxyalkylene chain [0006].

6. Claims 7, 10, 17 and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shuichi et al (JP Pub. 2000/110077) in view of Hiroshi et al. (JP Pub. 2000/110068) as applied to the above claims, and further in view of Trinh et al. (U.S. Pat. 6,790,819 hereinafter, "Trinh").

Shuichi and Hiroshi are relied upon as set forth above. With respect to claims 7 and 17, Hiroshi discloses a silicone compound represented by formula (1):



The inside of a formula, and A, B and C are:

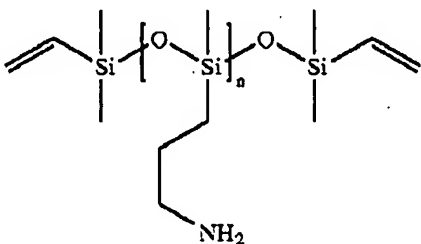


Moreover, L, M, and N show each number of average mols, and L is [ 1-100, and (preferably 1-50) N of 0-5 (preferably 0-3)M ] 1-1000 (preferably 1-600). R<sup>2</sup> It may be the same, or you may differ, the alkyl of the straight chain of carbon numbers 1-4 or branched chain, the alkenyl, hydroxyalkyl, and a vinyl group are shown, and it is R<sup>3</sup>. The alkylene group of the straight chain of carbon numbers 1-4 or branched chain is shown, and it is R<sup>4</sup>. The alkyl of the straight chain of a hydrogen atom or carbon numbers 1-4 or branched chain, the alkenyl, and a hydroxyalkyl radical are shown, and X shows a polyoxyethylene radical. The polymerization percentage of the polyoxyethylene chain per molecule is 35 - 75% most preferably 30 to 75% especially preferably 25 to 80% to the total weight of polyether denaturation silicone. These polyether mold denaturation silicone can be fundamentally manufactured by the well-known approach [0006-0009]. The Examiner considered Hiroshi group C in formula 1

(C) to read on group E of the instant claimed formula 6, wherein E represents a group represented by an alkyl group having 1-4 carbon atoms.

Shuichi and Hiroshi failed to teach group D represented by formula (i) or a mixture of a group represented by formula (i) and a group represented by formula (ii), wherein in the latter case, the proportion of the group represented by the formula (ii) in D is 50 mol % or less.

Trinh teaches a fabric care composition comprising of an aminofunctional silicone wherein the polyoxyalkylene chain of the silicone compound is attached with an amino group (Example VIII and Example IX).



Therefore, it would have been obvious to one of ordinary skilled in the art to at the time of the invention to modify the silicone compound of Hiroshi by attaching an amino group such as the claimed group D formula (ii) as taught by Trinh because such a modification is expressly suggested by Shuichi in view of Hiroshi and further in view of Trinh.



With respect to instant claims 10 and 20-26, Shuichi and Hiroshi failed to disclose the method of treating a fiber product by applying the said composition to the fiber product in the rinsing stage by spraying. Shuichi and Hiroshi also failed to disclose diluting the said composition to a point where component (a) (i.e. nonionic surfactant) is in a concentration of 20 to 1000 ppm and wherein the diluted composition is applied to the fiber product.

Trinh generally teaches a method of treating fabric by placing (applying) an effective amount of the aqueous solution onto the fabric surface or fabric article to be treat using a spray device, a roller, a pad, by dipping, soaking, treating in the rinse water (i.e. rinsing stage) (Col. 50, lines 25-37). Trinh further teaches a concentrated composition may be diluted with a water miscible solvent prior to applying onto the target surface (Col. 38, lines 3-20).

Trinh failed to teach a step of diluting the composition to a point where component (a) (i.e. nonionic surfactant) is in a concentration of 20 to 1000 ppm.

Shuichi and Hiroshi are combined with Trinh because all the references teach a fabric treating composition comprising of modified silicone compound. The above combination of familiar elements, such as nonionic surfactant, amino-modified silicone compound, tertiary amine, polymer and silicone compound, according to the know methods taught by Trinh yields the predictable result of treating a fabric. It would have been obvious to dilute the concentrated composition, as taught by Shuichi in view of Hiroshi, and applying the diluted composition onto a fabric to be treated by a spraying device as taught by Trinh. One having ordinary skill in the art would have understood

that the value needed for adequate concentration of surfactant needed to adequately treat the fabric and would have arrive at the optimum proportions of 20-1000 ppm of component (a) by dilution.

***Response to Arguments***

7. Applicant's arguments filed on 10/12/2007 have been fully considered but they are not persuasive.

In response to Applicant's remark on pages 10-16, acknowledged that silicone compound taught by Shuichi is useful for finishing effects (page 14, paragraph 2). However, Applicant argues that Shuichi fails to suggest or teach the inventive advantage of improving the finishing effects while retaining the tensile quality. The Examiner respectfully disagrees with the Applicant argument.

Shuichi teaches the claimed silicone compound within the claimed proportion ([0010 and [0018]). Given that Shuichi's silicone compound (A) and the instant claimed silicone compound (B) are same material, the silicone compound (A) of Shuichi would have the same tensile quality effects as that instantly claimed because products of identical chemical composition cannot have mutually exclusive properties (i.e. tensile quality).

Applicant also argues that Shuichi fails to suggest or teach the nonionic surfactant of Shuichi used in the claimed amount and do not providing the treated fiber product with tensile quality.

Consider claim 1, Shuichi in view of Hiroshi teach the nonionic surfactant (HLB= 8-18) loaded at 0.005-10% weight [0010]. Thus, Hiroshi disclosure meets the claimed limitation of a nonionic surfactant having an HLB of 16 or more and presence in the composition at 1-60 percent by mass (i.e. weight percent). In addition, the court has held that structurally similar compounds (nonionic surfactant) are generally expected to have similar properties (tensile quality). In re Gvurik, 596 F. 2d 1012,201 USPQ 552.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh T. Nguyen whose telephone number is (571) 272-8082. The examiner can normally be reached on Monday-Friday 8:00-5:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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KTN  
11/21/2007



Mark Kopec  
Primary Examiner